

Remarks

Applicants thank the Examiner for the courtesy of a telephonic interview on Thursday, August 5, 2004. During the interview a draft version of the claim amendments shown above was sent to the Examiner via e-mail and discussed. During and following the interview, PDF files containing revised Figs. 10a through 10d and original Figs. 14a through 14n and 19a through 23 were also sent to the Examiner via e-mail.

In the present amendment, patent application citations in paragraphs 0001, 0013 and 0089 have been updated and paragraphs 0032, 0067 and 0068 have been editorially amended. Revised Figs. 10a through 10d have also been enclosed. Applicants hope that the revised figures and the above-mentioned PDF files will permit better reproduction of the Drawing.

Claims 1, 3 and 17 have been amended to recite devices having periods of contact with the substrate within $\pm 1\%$ of one another. Antecedent basis for this amendment may be found in the written description at, e.g., paragraphs 0016 and 0046. Corresponding editorial amendments have been made in claims 4 – 6 and 21. Claim 1 has also been amended to relocate a portion of the recited coating caliper defect clause.

Claims 1, 3, 17 and 19 have been amended to recite or to refer to a substrate direction of motion. Antecedent basis for this amendment may be found in the written description at, e.g., paragraph 0050.

Claim 17 has been amended to recite a coating having bands of light or heavy coating extending transverse to the direction of motion. Antecedent basis for this amendment may be found in the written description at, e.g., paragraphs 0003 and 0004.

Claim 26 has been amended to recite a coating having a lengthwise caliper variation. Antecedent basis for this amendment may be found in the written description at, e.g., paragraph 0056.

Claims 28 – 31 have been amended to recite applying cross web stripes and to refer to numeric dimensionless minimum caliper values rather than white or light gray regions in the drawing figures. Antecedent basis for these amendments may be found in the written description at, e.g., paragraphs 0082 and 0097 through 0100.

Following entry of this amendment, claims 1 – 31 will be pending in this application with claims 32 – 98 having been withdrawn.

Rejection of Claims 1 – 25 and 29 – 31 under 35 USC §112

Claims 1 – 25 and 29 – 31 were rejected under 35 USC §112, second paragraph, as being indefinite for employing the term "substantially" in independent claims 1, 17 and 29 – 31. This Rejection should be moot in view of the above-mentioned claim amendments.

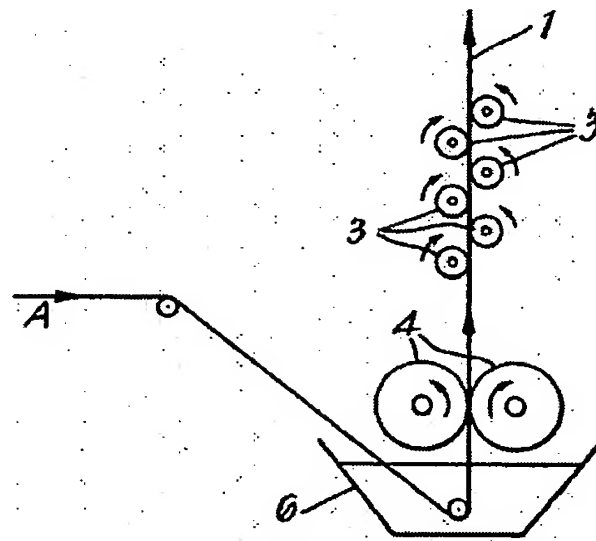
Applicants note for the record that dependent claims 7, 8, 22 and 23 recite methods employing pick-and-place devices like those recited in independent claims 1 or 17, and "further comprising" at least one pick-and-place device having a period of contact as recited in the dependent claims. The periods of contact recited in claims 7, 8, 22 and 23 may be considered to be "substantially different" from the average period of the other devices (see, e.g., paragraph 0016).

Rejection of Claims 28 – 31 under 35 USC §112

Claims 28 – 31 were rejected under 35 USC §112, second paragraph, as being indefinite for referring to figures in the Drawing. This Rejection should be moot in view of the above-mentioned claim amendments.

Rejection of Claims 17 – 21, 24 and 25 under 35 USC §102(b)

Claims 17 – 21, 24 and 25 were rejected under 35 USC §102(b) as anticipated by U.K. Patent No. 1 278 099 (Hall) on grounds, *inter alia*, that "HALL's invention functions to smooth out longitudinal striations (i.e., caliper variations including depressions) imparted to the coating by metering rollers". Applicants request reconsideration. Hall uses a bath 6 and metering (squeeze) rollers 4 to apply a coating and then uses sideways smearing movements of counterrotating rollers 3 to flatten out the longitudinal striations (see e.g., page 2, lines 18 – 37) and Hall's **Fig. 1**, reproduced below:



Hall's longitudinal striations have not been shown to be bands of light or heavy coating extending transverse to a substrate direction of motion as recited in applicants' amended claim 17. Such bands may arise, for example, when using a gravure roll to apply a coating (see, e.g., applicants' paragraph 0004). Applicants accordingly request withdrawal of the rejection of claims 17 – 21, 24 and 25 under 35 USC §102(b) as anticipated by Hall.

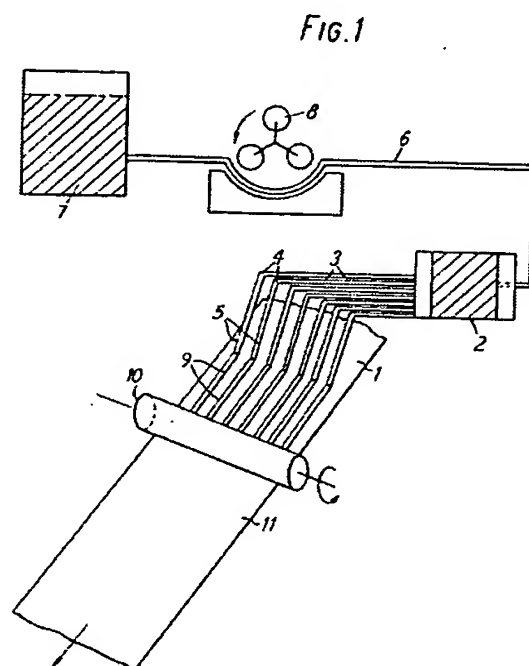
Rejection of Claims 1 – 6, 9, 10, 15 and 16 under 35 USC §§102(b) or 103(a)

Claims 1 – 6, 9, 10, 15 and 16 were rejected under 35 USC §102(b) as anticipated by or, in the alternative, under 35 USC §103(a) as obvious over Hall on, *inter alia*, the grounds mentioned above and the further grounds that "It is also the examiner's position that HALL's "longitudinal striations" are inclusive of the broad range of caliper defects claimed." Applicants request reconsideration. Hall's longitudinal striations have not been shown to be coating caliper defects in a direction of substrate motion ranging from a complete absence of coating to an excess of as much as 200% of the average coating caliper as recited in applicants' amended claim 1. Applicants accordingly request withdrawal of the rejection of claims 1 – 6, 9, 10, 15 and 16 as anticipated by or obvious over Hall.

Rejection of Claims 1, 3, 7 – 10 and 15 under 35 USC §§102(b) or 103(a)

Claims 1, 3, 7 – 10 and 15 were rejected under 35 USC §102(b) as anticipated by or, in the alternative, under 35 USC §103(a) as obvious over U.S. Patent No. 4,102,301 A (Reade et al.) on grounds, *inter alia*, that "READE further teaches that the coating material is applied as a pattern of stripes, later spread and smoothed-out by smoothing rollers (2:43-

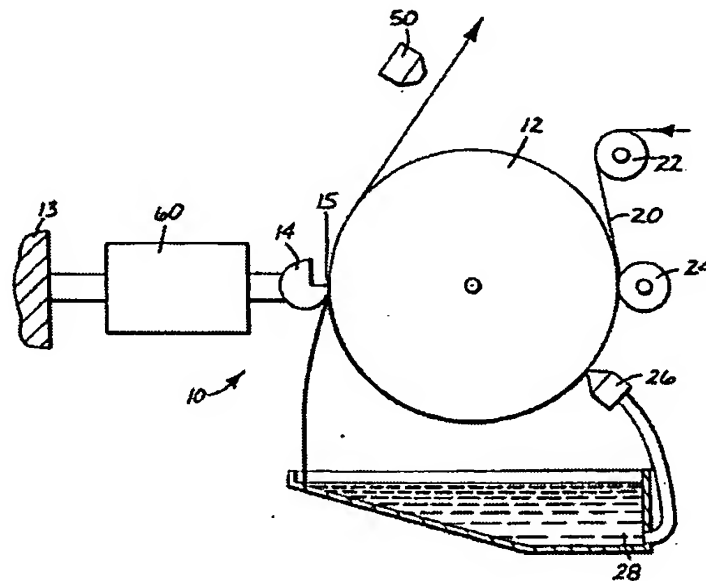
3:22). The stripes are separated by voids having no coating at all (see Fig. 1).” Applicants request reconsideration. Reade et al.’s stripes run in the web direction of motion, see Reade et al.’s **Fig. 1**, reproduced below:



Reade et al.’s stripes have not been shown to be coating caliper defects in a direction of substrate motion ranging from a complete absence of coating to an excess of as much as 200% of the average coating caliper as recited in applicants’ amended claim 1. Applicants accordingly request withdrawal of the rejection of claims 1, 3, 7 – 10 and 15 as anticipated by or obvious over Reade et al.

Rejection of Claims 11 and 26 under 35 USC §103(a)

Claims 11 and 26 were rejected under 35 USC §103(a) as unpatentable over Hall as applied to claim 1 above, and further in view of U.S. Patent No. 5,409,732 A (Leonard et al.). Leonard et al. shows a coating device having an adjustable roll gap controller 14, see Leonard et al.’s **Fig. 1**, reproduced below:



Applicants request reconsideration. As to claim 11, the proposed modification of Hall's method using Leonard et al.'s roll gap controller has not been shown to suggest a coating having coating caliper defects in a direction of substrate motion ranging from a complete absence of coating to an excess of as much as 200% of the average coating caliper as recited in independent claim 1 from which claim 11 depends. As to claim 26, this proposed modification has not been shown to suggest changing a period of caliper variation as recited in amended claim 26. Applicants accordingly request withdrawal of the rejection of claims 11 and 26 as unpatentable over Hall in view of Leonard et al.

Rejection of Claims 11 – 14, 26 and 27 under 35 USC §103(a)

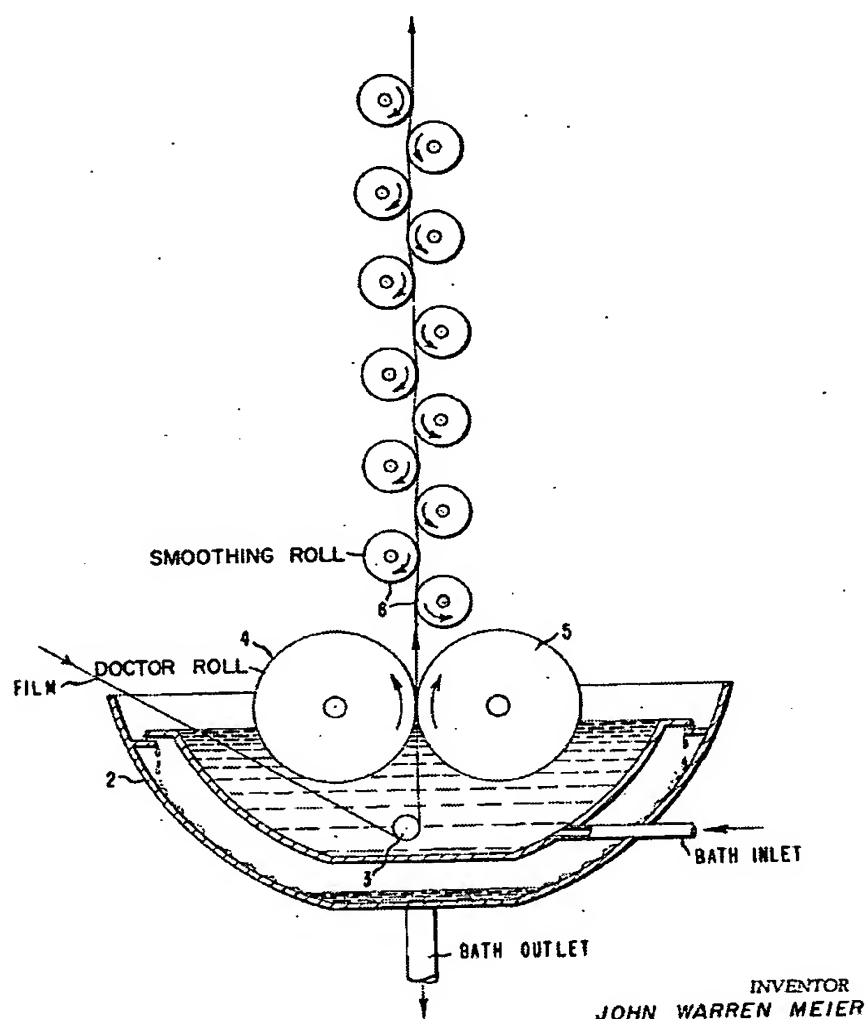
Claims 11 – 14, 26 and 27 were rejected under 35 USC §103(a) as unpatentable over Reade et al. as applied to claim 1 above, and further in view of Leonard et al. Applicants request reconsideration. As to claims 11 – 14, the proposed modification of Reade et al.'s method using Leonard et al.'s roll gap controller has not been shown to suggest a coating having coating caliper defects in a direction of substrate motion ranging from a complete absence of coating to an excess of as much as 200% of the average coating caliper. As to claims 26 and 27, this proposed modification has not been shown to suggest changing a period of caliper variation. Applicants accordingly request withdrawal of the rejection of claims 11 – 14, 26 and 27 as unpatentable over Reade et al. in view of Leonard et al.

Rejection of Claims 12 – 14 and 27 under 35 USC §103(a)

Claims 12 – 14 and 27 were rejected under 35 USC §103(a) as unpatentable over Hall in view of Leonard et al. as applied to claim 11 above, and further in view of Reade et al. Applicants request reconsideration. As to claims 12 – 14, the proposed modification of Hall's method using Leonard et al.'s roll gap controller has not been shown to suggest a coating having coating caliper defects in a direction of substrate motion ranging from a complete absence of coating to an excess of as much as 200% of the average coating caliper. Also, Reade et al.'s cited col. 3, line 49 – 51 statement concerning repeated application has not been shown to provide a coating having such defects. As to claim 27, the proposed modification has not been shown to suggest changing a period of caliper variation. Reade et al.'s cited col. 3, line 49 – 51 statement concerning repeated application has not been shown to provide a change in the period of caliper variation. Applicants accordingly request withdrawal of the rejection of claims 12 – 14 and 27 as unpatentable over Hall in view of Leonard et al and further in view of Reade et al.

Rejection of Claims 17, 19 and 22 – 25 under 35 USC §103(a)

Claims 17, 19 and 22 – 25 were rejected under 35 USC §103(a) as unpatentable over Reade et al. in view of U.S. Patent No. 2,977,243 A (Meier). Meier is similar to Hall (including machine direction striations, see e.g., col. 4, lines 42 – 47) but with more smoothing rollers and without reciprocal smoothing roller movement, see Meier's drawing, reproduced below:



Applicants request reconsideration. The proposed modification of Reade et al.'s method by addition of Meier's greater number of rollers has not been shown to suggest a coating having bands of light or heavy coating extending transverse to a direction of substrate motion. Applicants accordingly request withdrawal of the rejection of claims 17, 19 and 22 – 25 as unpatentable over Reade et al. in view of Meier.

Rejection of Claims 28 – 31 under 35 USC §103(a)

Claims 28 – 31 were rejected under 35 USC §103(a) as unpatentable over Hall in view of Reade et al. Applicants request reconsideration. The proposed modification of Hall's method using Reade et al.'s stripes has not been shown to suggest applying a wet coating of cross web stripes as recited in amended claims 28 – 31. Applicants accordingly request withdrawal of the rejection of claims 28 – 31 as unpatentable over Hall in view of Reade et al.

Rejection of Claims 28 and 29 under 35 USC §103(a)

Claims 28 and 29 were rejected under 35 USC §103(a) as unpatentable over Reade et al. Applicants request reconsideration. Reade et al.'s stripes have not been shown to suggest applying a wet coating of cross web stripes as recited in amended claims 28 and 29. Applicants accordingly request withdrawal of the rejection of claims 28 and 29 as unpatentable over Reade et al.

Rejection of Claims 30 and 31 under 35 USC §103(a)

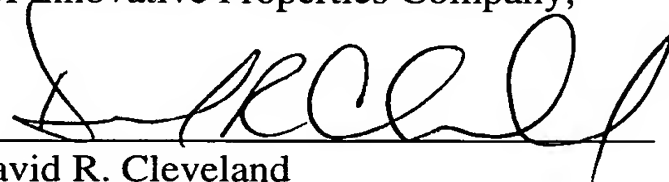
Claims 30 and 31 were rejected under 35 USC §103(a) as unpatentable over Reade et al. in view of Meier. Applicants assume that the citation to Hall at the bottom of page 15 was intended to be a reference to Reade et al. Applicants request reconsideration. The proposed modification of Reade et al.'s method using Meier's greater number of rollers has not been shown to suggest applying a wet coating of cross web stripes as recited in amended claims 30 and 31. Applicants accordingly request withdrawal of the rejection of claims 30 and 31 as unpatentable over Reade et al. in view of Meier.

Conclusion

Applicants have made an earnest effort to overcome all rejections asserted in the Office Action. The cited primary references to Hall and Reade et al. seek to smooth out longitudinal moving web striations. These references, whether taken alone or in combination with one another or with the cited secondary references to Leonard et al. and Meier do not disclose or suggest a method of improving the uniformity of a coating having coating caliper defects in the direction of substrate motion ranging from a complete absence of coating to an excess of as much as 200% of the average coating caliper, as recited in amended claim 1. These references also do not disclose or suggest a method of improving the uniformity of a wet coating having bands of light or heavy coating extending transverse to the direction of substrate motion as recited in amended claim 17. Moreover, these references do not disclose or suggest a method for coating a moving web in which a coating having a lengthwise caliper variation is applied and the period of caliper variation is changed as recited in amended claim 26. Finally, these references do not disclose or suggest a method for coating a moving web comprising applying a wet coating of cross web stripes as recited in amended claims 28 – 31.

Applicants accordingly request reconsideration and withdrawal of the rejections, and passage of the application to the issue branch.

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